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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------------------|------------------|
| 10/692,708 | 10/24/2003 | Kazuo Kimura | 3331CIP | 9796 |
| 49224 7590 02/16/2007 NIRO, SCAVONE, HALLER & NIRO 181 W. MADISON SUITE 4600 CHICAGO, IL 60602 | | | EXAMINER MORILLO, JANELLE COMBS | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1742 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/692,708

Applicant(s)

KIMURA ET AL.

Examiner

Janelle Combs-Morillo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 1-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al (US 5,266,130).

Uchida teaches an Al-Mg-Si alloy sheet suitable for panels for automobiles (column 13 lines 13-15) comprising of (in weight%): 0.4-1.7% Si, 0.2-1.4% Mg, $\leq 1.0\%$ Cu, $\leq 0.50\%$ Mn, $\leq 0.20\%$ V (abstract), typically $\sim 0.15\%$ Fe (Table 1) balance aluminum, which completely overlaps the presently claimed composition ranges of Si, Mg, Cu, Mn, and V. Additionally, Uchida teaches examples A, E, F, G that fall within the presently claimed composition ranges of Si, Mg, Cu, Mn, and V (instant claims 21, 25). Concerning the Fe range, 0.15% Fe taught by Uchida is held to be a close approximation of the presently claimed minimum of 0.18%.

Though Uchida teaches that the final product is rolled into sheet thickness, it would have been obvious to one of ordinary skill in the art to roll the alloy taught by Uchida into a variety of thickness, such as the presently claimed sheet thickness, depending on the desired application.

With regard to the process steps, it is well settled that a product-by-process claim defines a product, and that when the prior art discloses a product substantially the same as that being claimed, differing only in the manner by which it is made, the burden falls to applicant to show

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that any process steps associated therewith result in a product materially different from that disclosed in the prior art. See MPEP 2113, *In re Brown* (173 USPQ 685) and *In re Fessman* (180 USPQ 524) *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292.

Therefore it is held that Uchida has created a prima facie case of obviousness of the presently claimed invention.

3. Claims 22-24, 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida and further in view of WO 03/074750A1 (WO'750).

Uchida is discussed in paragraphs above.

Uchida does not teach using said Al-Mg-Si series alloy plate as a plasma display member or LCD member. However, WO'750 at p 9 teaches high strength Al-Mg-Si alloys are useful for plasma display materials, including plasma display rear surface chassis member, a plasma display box member and a plasma display exterior member, or a liquid crystal display material such as a liquid crystal display rear chassis member, a liquid crystal display bezel member, a liquid crystal display reflecting sheet member, a liquid crystal display reflecting sheet supporting member and a liquid crystal display box material. Said Al-Mg-Si alloys can also be used in heat dissipation plates. It would have been obvious to one of ordinary skill in the art to use the Al-Mg-Si alloy taught by Uchida for a variety of plasma or LCD members, because

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WO'750 teaches Al-Mg-Si alloys are effective for plasma display members or LCD members because of their formability and strength (WO'750, p 9).

Response to Amendment/Arguments

4. In the response filed on November 13, 2006 applicant amended cl. 21, 25, 29-32 and submitted various arguments traversing the rejections of record.

5. Applicant's argument that the present invention is allowable over the prior art of record because the presently amended Fe minimum of 0.18% is not taught or suggest by Uchida has not been found persuasive. As stated above, 0.15% Fe taught by Uchida is held to be a close approximation of the presently claimed minimum of 0.18%.

A prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (Court held as proper a rejection of a claim directed to an alloy of "having 0.8% nickel, 0.3% molybdenum, up to 0.1% iron, balance titanium" as obvious over a reference disclosing alloys of 0.75% nickel, 0.25% molybdenum, balance titanium and 0.94% nickel, 0.31% molybdenum, balance titanium.). Even without complete overlap of the claimed range and the prior art range, a minor difference shows a prima facie case of obviousness. *Haynes Int'l v. Jessup Steel Co.*, 8 F.3d 1573, 1577 n.3 (Fed. Cir. 1993). In the instant case, a prima facie case of obviousness has been established because the prior art of Uchida teaches an alloy that overlaps the instant alloying ranges of Si, Mg, Cu, and is a close approximation of Fe, wherein said alloy is processed in substantially similar working and heat treating steps.

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6. When the Examiner has established a *prima facie* obviousness, the burden then shifts to the applicant to rebut. *In re Dillon*, 919 F.2d 688, 692, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (en banc). Rebuttal may take the form of “a comparison of test data showing that the claimed compositions possess unexpectedly improved properties... that the prior art does not have, that the prior art is so deficient that there is no motivation to make what might otherwise appear to be obvious changes, or any other argument.. that is pertinent.” *Id.* at 692-93; USPQ2d 1901. Applicant has not directed the examiner to evidence of unexpected results/criticality of the presently claimed Fe minimum, compared to the prior art’s close approximation.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


JCM
February 13, 2007


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SUPERVISOR
FEB 13 2007